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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,634	02/24/2005	Tetsujiro Kondo	450100-04715	2139

7590 04/20/2009  
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EXAMINER
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NEGRON, WANDA M

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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04/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/525,634	<b>Applicant(s)</b> KONDO ET AL.	
	<b>Examiner</b> WANDA M. NEGRON	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,8,10-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,6,8,10,12-15,18 and 19 is/are allowed.
- 6) ☒ Claim(s) 5,11,16,20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see page 16, filed on 12/16/2008, with respect to claims 1-3, 5, 6, 8, 10-16 and 18-20 have been fully considered and are persuasive. The prior art rejections of claims 1-3, 5, 6, 8-16 and 18-20 have been withdrawn. However, upon further consideration, a new § 101 rejection is made. Since this is a new ground of rejection, which was not done because of an amendment, **this action is non-final**.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claim 11 is rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Amended claim 11 recites in lines 3-6, "and when a threshold value is reached or the movement vectors are located in the horizontal direction or in the vertical direction, the camera operation estimating means estimates them to be the panning operation or the tilting operation, respectively", which is considered to be new matter. The specification as filed discloses estimating a parallel movement (*e.g.*, panning or tilting)

Art Unit: 2622

when a threshold or more of pixels of the inputted image (*i.e.*, a number of pixels of the inputted image is equal to or more than a threshold) have the same movement (see figure 7). The specification as filed does not disclose estimating a parallel movement merely when “the movement vectors are located in the horizontal direction or in the vertical direction”.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 5, 20 and 21 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, the meaning of the phrase “a movement vector number for each of the movement vectors” is not clear.

Claims 20 and 21 recite the limitation “the extracted image signals” in lines 3 and 10, respectively. There is insufficient antecedent basis for this limitation in the claim. In addition, the meaning of the limitation “controls an image signal displayed on each of the display devices among the extracted image signals in accordance with the arrangement of the plurality of display devices” is unclear. For examining purposes, claims 20 and 21 will be interpreted as reciting “controls an image signal displayed on each of the display devices” for the remainder of this Office action.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 16 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claim 16 does not explicitly recite a hardware element tied to the image signal processing method, and the application as filed further discloses an embodiment comprising software, per se (see page 25). Therefore, a reasonable interpretation of an image signal processor for performing the image signal processing method would be software, per se.

Furthermore, the steps in this claim can be performed manually without the use of a particular machine. The claim could conceivably be interpreted to mean that someone obtains multiple printed pictures with their respective movement vectors (since the claimed process does not claim a step for determining movement vectors) taken within a known period of time, determines that the camera was moving during the picture-capturing period of time, and determines a start time and/or the completion time of the camera movement on the basis of the known period of time. The storing step could be interpreted as simply remembering or writing on a piece of paper the movement result of a previously seen picture, while the outputting step could conceivably be interpreted as someone selecting the pictures determined to have been taken during the time when the camera was moving.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al. (US Patent No. 5,809,202), hereinafter referred to as Gotoh, and further in view of Hara (JP Application Publication No. 11-282442).**

Regarding **claim 21**, Gotoh teaches an image signal processor comprising: an input means for inputting an image signal (*i.e.*, moving image recording medium 303); a camera operation estimating means for estimating a start time and/or a completion time of a camera operation from a movement detected in the inputted image signal (*i.e.*, the system comprising a motion vector detecting section 304, a camera operation assuming section 305 and a shot breakpoint detecting section 307; see also col. 23, lines 19-28 and lines 39-47) and extracting the image signal at the estimated start time and/or the estimated completion time of the camera operation (see col. 23, lines 60-65); and an output means for outputting the extracted image signal (*i.e.*, output section 309; see col. 23, lines 60-65). In addition, Gotoh discloses displaying (see col. 29, lines 9-13) the inputted image signal and the extracted image signal (*i.e.*, the image corresponding to a shot breakpoint is outputted together with “images of a prescribed number of frames”; see col. 23, lines 60-65, col. 28, lines 36-39, and figure 24E). Gotoh, however, does not

Art Unit: 2622

explicitly disclose displaying the inputted image signal and the extracted image signal in a plurality of display devices.

The concept of displaying an image in multiple displays is well known in the art, as evidenced by Hara. It would have been obvious to one having ordinary skill in the art at the time the invention was made to try to display the inputted image signal and the extracted image signal in a plurality of display devices since a person with ordinary skill has good reason to pursue the known options within his or her technical grasp if this leads to an anticipated result of displaying the inputted image signal and the extracted image signal in multiple display devices instead of one display device.

In addition, the concept of having a single processor controlling an image signal displayed on each of a plurality of display devices is well known in the art, as evidenced by Hara (see abstract and drawing 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to try to use an image signal processor for controlling an image signal displayed on each of a plurality of display devices in accordance with the arrangement of the plurality of display devices since a person with ordinary skill has good reason to pursue the known options within his or her technical grasp if this leads to an anticipated result of controlling an image signal displayed on each of a plurality of display devices.

***Allowable Subject Matter***

**Claim 1-3, 6, 8, 10, 12-15 and 18-19 are allowed.**

Claims 5 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Regarding **claims 1-3, 6, 8, 10 and 12-15**, the relevant prior art fails to teach or reasonably suggest an image signal processor, as disclosed in independent claim 1, comprising: an input means for inputting an image signal; a camera operation estimating means for estimating a start time and/or a completion time of a camera operation from a movement detected in the inputted image signal and extracting the image signal at the estimated start time and/or the estimated completion time of the camera operation, the camera operation estimating means comprising: a movement detecting means for detecting the movement of the inputted image signal on the basis of movement vectors of pixels corresponding to the inputted image signal; and a second memory for storing previously determined movement, wherein the start time and/or the completion time of the camera operation are decided on the basis of the determined movement of the inputted image signal and an output from the second memory such that: if the output from the second memory is different from the movement of the inputted image signal and the output indicates no movement, then the start time of the camera operation is estimated, and, if the output from the second memory is different from the movement of the inputted image signal and the output indicates a movement,



Art Unit: 2622

then the completion time of the camera operation is estimated; and an output means for outputting the extracted image signal.

Regarding **claim 18**, the relevant prior art fails to teach or reasonably suggest a recording medium capable of being read by a computer on which a program for performing a prescribed process by the computer is recorded, said program comprising: an input step of inputting an image signal; a camera operation estimating step of estimating a start time and/or a completion time of a camera operation from a movement detected in the inputted image signal and extracting the image signal at the estimated start time and/or the estimated completion time of the camera operation, the camera operation estimating step comprising: a movement detecting step for detecting the movement of the inputted image signal on the basis of movement vectors of pixels corresponding to the inputted image signal; and a storing step for storing previously determined movement, wherein the start time and/or the completion time of the camera operation are decided on the basis of the determined movement of the inputted image signal and an output generated based on the storing step such that: if the generated output is different from the movement of the inputted image signal and the output indicates no movement, then the start time of the camera operation is estimated, and, if the generated output is different from the movement of the inputted image signal and the output indicates a movement, then the completion time of the camera operation is estimated; and an output step of outputting the extracted image signal.

Regarding **claim 19**, the relevant prior art fails to teach or reasonably suggest an image signal processing system comprising: an image signal processor including an input means for inputting an image signal; a camera operation estimating means for estimating a start time and/or a completion time of a camera operation from a movement detected in the inputted image signal and extracting the image signal at the estimated start time and/or the estimated completion time of the camera operation, the camera operation estimating means comprising: a movement detecting means for detecting the movement of the inputted image signal on the basis of movement vectors of pixels corresponding to the inputted image signal; and a second memory for storing previously determined movement, wherein the start time and/or the completion time of the camera operation are decided on the basis of the determined movement of the inputted image signal and an output from the second memory such that: if the output from the second memory is different from the movement of the inputted image signal and the output indicates no movement, then the start time of the camera operation is estimated, and, if the output from the second memory is different from the movement of the inputted image signal and the output indicates a movement, then the completion time of the camera operation is estimated; and an output means for outputting the extracted image signal and a plurality of display devices for displaying the inputted image signal and the extracted image signal.

It is noted that, although the specification as filed discloses an embodiment wherein the image processor is considered software, *per se*, independent claims 1, 18, 19 and 21 disclose at least one hardware element (e.g., claims 1 and 19 disclose a

Art Unit: 2622

memory, claim 18 discloses a recording medium, and claim 21 discloses a plurality of display devices).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA M. NEGRON whose telephone number is (571)270-1129. The examiner can normally be reached on Mon-Fri 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/525,634

Page 11

Art Unit: 2622

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/Wanda M. Negrón/

Examiner, Art Unit 2622

April 14, 2009

/Sinh Tran/

Supervisory Patent Examiner, Art Unit 2622